



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,397	04/15/2004	Kevin Erik Hultquist	1928-0150PUS2	6393
2292	7590	09/15/2006	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			GRAHAM, GARY K	
			ART UNIT	PAPER NUMBER
			1744	

DATE MAILED: 09/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/824,397	<b>Applicant(s)</b> HULTQUIST ET AL.	
	<b>Examiner</b> Gary K. Graham	<b>Art Unit</b> 1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanazawa (US patent 6,343,403) in view of Ryck (US patent 3,085,821).

Art Unit: 1744

The patent to Kanazawa discloses the invention, a wiper mechanism (fig.2), substantially as is claimed. Kanazawa discloses a mounting bracket (42), a motor (58A) fixed to the bracket via gearbox (58B), a crank (72) driven by the motor and coupled with pivot shafts (20,22) by connecting links (76,78) and pivot levers (24,26). The pivot shafts are pivotally supported in bearing structures (16,18) fixed with the bracket. Operation of the motor causes pivotal movement of the pivot shafts and thus oscillation of attached wiper arms (not shown but disclosed).

The patent to Kanazawa discloses all of the above recited subject matter with the exception of a particular wiper arm and its attachment to the pivot shaft wherein an end of the pivot shaft has a DIN style tapered and knurled end, a ring driver is provided having a through hole with an inner surface adapted to mate with the knurled end of the pivot shaft and an outer surface adapted to mate with a US style socket on the wiper arm and fastening means for securing the driver and arm to the shaft.

The patent to Ryck (see figs.1,4) discloses a wiper arm (18,20) mounted to a pivot shaft (46). The arm has, at least as far as defined, a "US style" socket (26) while the shaft has, at least as far as defined, a "DIN style" tapered and knurled coupling surface (48). A ring driver (56) is provided having a through hole (58) with an inner surface adapted to mate with the surface of the pivot shaft and an outer surface which is tapered and knurled (slots 63) to adapt to the socket in the wiper arm. Fastening means (52) secures the driver and arm to the pivot shaft.

It would have been obvious to one of skill in the art to provide the wiper mechanism of Kanazawa with a wiper arm attached to the pivot shafts, as clearly suggested by Ryck, to enable infinite angular adjustment between the arm and pivot shaft.

Art Unit: 1744

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanazawa (US patent 6,343,403) in view of Ryck (US patent 3,085,821) as applied to claim 1 above, and further in view of Egner-Walter (US patent 5,894,628).

The patents to Kanazawa and Ryck disclose all of the above recited subject matter with the exception of the fastening means comprising a screw and a thread hole in the end of the pivot shaft.

The patent to Egner-Walter discloses (figs. 11,12) a wiper mechanism wherein a wiper arm (1,2) can be attached to a pivot shaft (8) either via a nut (9) threaded on an end of the shaft or a screw (13) received in a threaded hole in the end of the shaft. Such appear as art recognized equivalent fastening means.

It would have been obvious to one of skill in the art to use a screw to attach the wiper arm of Ryck to the pivot shaft instead of a nut, as clearly suggested by Egner-Walter, as a mere alternative fastening means and to enable use of a hollow pivot shaft thereby reducing weight of the mechanism.

### *Conclusion*

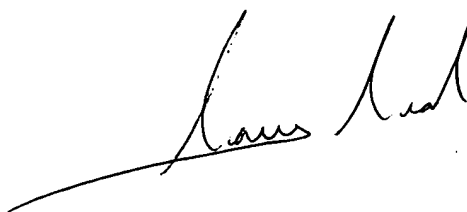
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant's attention is directed to German patent 2121112. Note figure 2 therein which shows a ring driver (13) substantially as is claimed.

Art Unit: 1744

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary K. Graham whose telephone number is 571-272-1274. The examiner can normally be reached on Tuesday to Friday (6:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys J. Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Gary K. Graham', is written over a horizontal line.

Gary K Graham  
Primary Examiner  
Art Unit 1744